Monad Electronics

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Introduction

Winner of National Award for year 2009-2010 in R&D

Monad Electronics is An ISO 9001:2015 certified company, which has been involved for over 20 year in the business of designing, manufacturing and export of Electronic Industrial products, Testing equipments , sensors and related indicating and controlling devices and allied products related to Data logging & Acquisition.

Monad is specialized in providing high end and high accuracy customized Force Transducers, Multi-Axial Force Transducers and Torque Sensors. Monad is an expert in providing import substitutes of high end Load Cells, Safe Load Indicators, etc

We are supplying to leading industries and government institutions and are also exporting our products to USA, Germany, Belgium, Turkey, Australia, U.A.E., Singapore, Spain, Brazil, New Zealand, Philippines, UK, Croatia and to the African countries.

Rotary Torque Sensor

Monad Manufacturers a very wide range of Rotary Torque sensors, which includes Slip ring Type, Optical Type, Rotary Transfer Type and Digital Telemetry Type & Clamp On Type with Inbuilt RPM, and Angle sensor which makes it's products unique.

Continuous upgradation of Technology, customized design, Controllers with Digital & analog Output customized software and on site service makes it ahead of all other manufacturers

All models are available in Capacity range of 0.1 Nm. to 100 KNm. with High Accuracy up to 0.01%

Digital Telemetry Type Rotary Torque Sensor

Monad's Wireless Torque Sensors are utilized in applications where conventional torque transducers are not practical due to high shaft speeds, vibration, and harsh environments. These factors plays major problems for conventional foot-mounted rotary torque transducers with bearings and slip rings.

The use of RF telemetry to transfer data makes our wireless torque sensor highly reliable and durable. Batteries are used to provide energy to the rotating sensor and transmitter. These technologies permit a great deal of movement between the rotating sensor and stationary loop antenna with no affect on the signal quality. Minimal alignment between the stationary and rotating components is required.

Digital Telemetry Type Rotary Torque Sensor

Digital Telemetry Type Rotary Torque Sensor

SPECIFICATIONS:-

Rated Output	24 Bit Digital
Non linearity	±0.1% of RO
Non repeatability	±0.1% of RO
Hysteresis	±0.1% of RO
Safe overload	150% or Rated capacity
Power supply	In built Rechargeable Battery 7.2V/2.2 Ah
Sampling Rate	10 Samples/ Sec
Temperature shift Zero	±0.01% of RO/C
Temperature shift Span	±0.02% of Load/C
Compensated Temperature	25 to 50°C
Operating Temperature	00 to 70 °C
Insulation resistance	> 2000 MΩ
Battery Backup	> 12 Hours, when fully charged
RF link carrier frequency	2.4 GHz
RPM Sensor*	Hall effect / Optical
RPM sensor accuracy*	±1RPM

Digital Telemetry Type Rotary Torque Sensor

Construction material		
	Sensor	Alloy steel/ Stainless Steel
Maximum RPM		5000 (RPM Class A)
		10000 (RPM Class B)
		30000 (RPM Class C)
Sensor Sealing		IP65

Software:-

System comes with our Specialized Data logging software to log Torque data in MS excel format in real time with time, date and Graphs plotting facility.

Rotary Transformer Type Torque Sensor

Monad's Rotary Transformer Type rotary torque sensors are suitable for laboratory applications as well as industrial environments because of their consistent accuracy from Static to maximum RPM, Contactless Power Supply and Signal output. High Accuracy, High Sampling Rate compact size and multiple mounting options.

The contactless transmission of supply voltage and measuring signal enables continuous operation with low maintenance.

Available in wide capacity range and mountings i.e. Flange Type, Square Drive and Key-Way Drive.

Rotary Transformer Type Torque Sensor

Specifications:-

Rated Output	2mv/v
Safe Over Load	150% of RO
Zero Balance	± 0.02% of RO
Excitation	10 V DC maximum
Non Linearity	± 0.01% of RO
Non Repeatability	± 0.01% of RO
Hysteresis	± 0.02% of RO
Temperature Shift Zero	± 0.01% of RO
Temperature Shift Span	± 0.01% of RO
Compensated Temperature	25°C to 50°C
Operating Temperature	0°C to 50°C
Operating RPM Range	0 to 12000

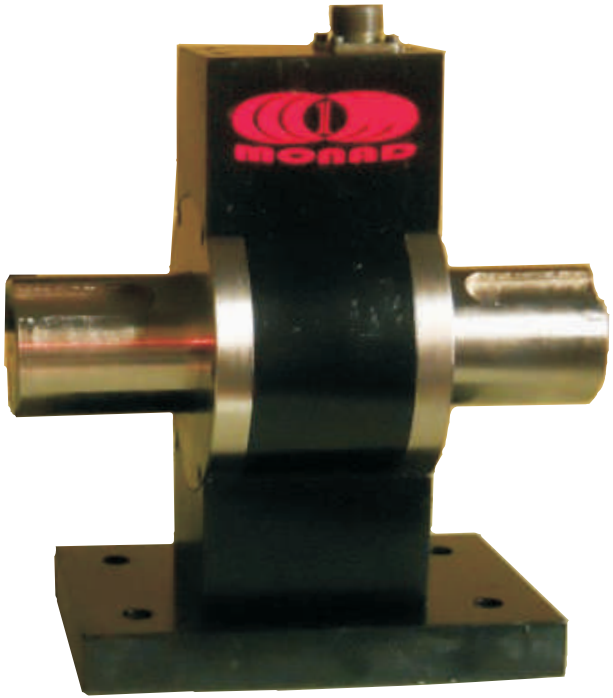
Optical Type Rotary Torque Sensor

Monad's Optical Type rotary torque sensors is an Economic replacement of Rotary Transfer Type Torque sensor where RPM range is up to 4000.These sensors are suitable for laboratory applications as well as industrial applications because of their consistent accuracy from Static to maximum RPM, Contactless Signal output. High Accuracy, High Sampling Rate compact size and multiple mounting options.

The contactless transmission of measuring signal enables continuous operation with low maintenance.

Available in wide capacity range and mountings i.e. Flange Type, Square Drive and Key-Way Drive.

Optical Type Rotary Torque Sensor



Optical Type Rotary Torque Sensor

Specifications:-

Rated Output	2mv/v
Safe Over Load	150% of RO
Zero Balance	± 0.02% of RO
Excitation	10 V DC maximum
Non Linearity	± 0.02% of RO
Non Repeatability	± 0.02% of RO
Hysteresis	± 0.02% of RO
Temperature Shift Zero	± 0.01% of RO
Temperature Shift Span	± 0.01% of RO
Compensated Temperature	25°C to 50°C
Operating Temperature	0°C to 50°C
Operating RPM Range	0 to 4000

Slip Ring Type Torque Sensor

Monad's Slip Ring Type rotary torque sensor is best suitable for Low RPM & continuous Torque Testing and Monitoring. Slip Ring Type Torque Sensor is suitable for RPM up to 1500. This is most Economic type of Rotary torque sensor which makes it ideal for verification and quality control of the production for industries.

Sensors are available in wide capacity range and various mounting options which make it suitable for the various Industries.

Slip Ring Type Torque Sensor

Slip Ring Type Torque Sensor

Specifications:-

Rated Output	2mv/v
Safe Over Load	150% of RO
Zero Balance	± 0.05% of RO
Excitation	10 V DC maximum
Non Linearity	± 0.01% of RO
Non Repeatability	± 0.05% of RO
Hysteresis	± 0.05% of RO
Temperature Shift Zero	± 0.02% of RO
Temperature Shift Span	± 0.05% of RO
Compensated Temperature	25°C to 50°C
Operating Temperature	0°C to 50°C
Operating RPM Range	0 to 900/1500

Digitizer-Controller

Display	Two Line alpha Numeric LCD display with backlit
Keypad	Soft Touch Keypad
Relay Output	Two Programmable set point wiyh Relay O/P
Communication Port	Rs232 O/P To Transfer Real Time Data
Calibration	Software Calibration
Peak Reading	Peak Reading Display Option, Selectable by Switch
Analog Output	0-10V or 4-20mA Corresponding to Torque

Technical Specifications

Power Supply	24V DC/ 12 VDC/ 220V AC
Micro-controller	2X8 Bit Industrial Grade Micro controller
Dimension of enclosure	96X192X300 mm
Communication port	Rs232 O/P to transfer real time data
Calibration	Software calibration
Peak reading	Peak reading display option, Selectable by switch(on request only)
Analog O/P	0-10 V or 4-20 mA corresponding to Torque